Orthocephalus mutabilis (Fallen).

The writer took 10 ♂♂, 6 ♀♀ macropterous, 31 ♀♀ short-winged, June 16, 1918, Ithaca, New York, also 2 ♂♂, 21 ♀♀ on June 19 at the same spot. This interesting species was accidentally discovered while the writer was picking wild strawberries, it being found breeding on the ox-eye daisy (*Chrysanthemum leucanthemum* L.) about seven miles west of Ithaca on the Mecklenburg road at an altitude of 1,200 feet. The specimens were quite numerous within a limited area, the leaves of the host plant showing plainly the work of the bugs. The species doubtless breeds on the same plant in Europe and could easily have been introduced to this country through the accidental importation of egg-infested plant stems used for packing or in hay. This European species was first recognized from two specimens taken at Orono, Maine, by Dr. C. W. Woods in 1913, and since that time no other specimens were known from America until the present find. Collecting on daisies in other regions may show the species to have a wider distribution than was expected.

NOTES ON PLEOCOMA (II).

By A. C. Davis, Pasadena, Calif.

This season has not been a good one for *Pleocoma,* because the rains did not begin till February and were few and light at first. *Pleocoma badia* had not been taken since 1914, so I determined to get some more of them this spring. On the 27th of January my father and I went up the Mt. Wilson trail to the place where the beetles were first found, at about 3,500 feet elevation. I had never dug for them, and did not know much about collecting them, so I was prepared to dig down two or three feet. We looked for their holes as we walked up the trail, and finally came upon three. They were about three fourths of an inch in diameter. I dug in the first hole, and ran my trowel into a large female about six inches below the surface. After that I was more careful with the trowel. We continued the search, and when we started home we had three females and two males safely bottled.

On the 7th of February I went up to the same place by way of Bailey Cañon, the type locality of *Pleocoma australis*. There was one hole of this species in the soft dirt at the side of the trail, but it was empty. I did not see another hole. This species must have a very limited distribution. On the Mt. Wilson trail I found one fine female of *P. badia*. Besides the specimens which I took Mr. Fall and Mr. Martin took between them six females and one male. Mr. Fall also dug out a larva from the bank at the side of the trail. The females of *Pleocoma* sometimes leave their burrows to dig new ones. The burrows from which they first emerge are clean and round, with no dirt thrown up, and extend straight down for at least fifteen inches and probably deeper. Those which they dig after leaving their first burrow are about four inches deep and covered with dirt in a little heap. Probably the beetles do their traveling at night. The males I took were half frozen and very quiet, but the females were very lively, and I kept a couple of them alive for a short time.

When I got home I let them dig. They work their front legs as if they were swimming, the toothed tibiæ pushing the dirt back, and the head and thorax are moved rapidly, up and down, packing the sides of the burrow solidly. When I turned the beetles on their backs they were helpless. They could not turn over. Their wings are tiny stubs and they seem unable to move either the wings or the elytra except to pull them tight to the body. I had heard that Scarabaeidæ smelled with the antennæ, so I got all the strong smelling things I could think of, such as acetic acid, vinegar, ether, chloroform, etc.; to all of these the beetles paid no attention until the antennæ were actually touched, and then they frantically tried to rub the antennæ clean with the forelegs.

The eggs have not been found, but one female which I dissected contained about fifty. They are light yellow, oval, about one mm. long.

The larva did not seem to differ much from Osten Sacken's description.

These beetles are very local, only having been collected in a place about one half mile in diameter on Mt. Wilson. I have found some elytra of *P. badia* in the feces of some kind of animal on the north side of Strawberry Peak, about six miles in a

straight line from Mt. Wilson, but the animal may have got them from Mt. Wilson.

The chipmunks and squirrels eat hundreds of the beetles. They must go out in the rain to dig them from their holes.

TWO NEW CYNIPIDÆ.

By William Beutenmüller, New York.

Cynips weldi sp. nov.

Female: Head black, surface microscopically crackled with numerous large, deep punctures and covered with whitish hairs. *Antennæ* 14-jointed, clavate and pubescent. *Thorax* black, somewhat shining, surface microscopically crackled with numerous large, pit-like punctures and rather densely covered with whitish hairs. Parapsidal grooves continuous, broadest at the scutellum and very fine forwardly. They are widely separated at the scutellum and curved inwardly before they reach the collar. Median groove wanting, only very slightly indicated at the scutellum. Anterior parallel lines very fine and scarcely extending to the middle of the pronotum. Lateral grooves rather long, running well forward to beyond the middle of the thorax. *Pleuræ* rugoso-punctate, opaque. *Scutellum* black, finely rugose with pit-like punctures, basal fovea large, deep and shining. *Abdomen* black or piceous, glossy with dense whitish hairs at the sides. *Legs* black or piceous, with whitish hairs, femora with large punctures. *Wings* hyaline, radial area closed. Cubitus faint and not continuous. Areolet large. *Length* 3–4 mm.

Gall: On the underside of the petiole of the leaf of white oak (*Quercus alba*) at the junction of the leaf blade, July to October. A rounded ball-like cluster of bright red or brownish galls closely pressed together and out of shape. The individual gall is rounded or tuberculated on the summit, flattened at the sides and pointed at the place of attachment. It is solid when fresh with a single barely visible larval chamber in the center. Late in September and in October the galls become detached, drop to the ground and the larvæ continue to feed therein. The gall gradually changes its shape and becomes subtriangular or polyhedral and may be taken for that of another species. The outer shell becomes thin, soft, darker in color, and the inner part is eaten away until only a hard and woody shell remains. Diameter of clusters 8–20 mm. Individual galls 5–10 mm.

Ithaca, New York (J. C. Bradley); Glencoe, Illinois (Lewis H. Weld); Boston, Mass. (Cora H. Clarke); New York and New Jersey (W. B.).